

Intergovernmental fiscal transfers to provinces

How equitable is the equitable share?

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ABSTRACT

Intergovernmental fiscal transfers from national government to provincial governments are essential to ensure that provinces perform their allocated functions at the required standard. In this regard, the Constitution of the Republic of South Africa, 1996 enshrines the principle that provincial governments are entitled to an equitable share of the nationally raised revenue. To determine the size of the share to which each province is entitled, South Africa makes use of an equitable share formula. This article tests the fiscal stress experienced by the different provinces as well as the size of the provincial allocations against objective criteria to determine how equitable these transfers are. Based on an analysis of a variety of documents such as national legislation and official publications, this article concludes that the equitable share formula is mainly a population-driven formula and that the population size of each province is the predominant contributor to the size of a provincial allocation. The outcomes point to the fact that although there is a correlation between the size of the allocation to each province and the criteria used to determine the fairness thereof, other factors that may influence the cost of services are not considered by the formula. This is relevant because aspects like economies of scale, topography and geography may influence a provincial government's ability to provide services.

INTRODUCTION

South Africa's intergovernmental fiscal relations are characterised by the fact that provincial governments have more expenditure functions than they can finance from their own revenue sources (Hendriks 2014:11). For instance, provinces collect, on average, less than 3% of their revenue from their own sources. This makes provinces largely dependent on national government for funding to perform their service-delivery functions.

Another important feature of intergovernmental fiscal relations in South Africa is the existence of horizontal fiscal imbalances, which have to do with the fact that geographical areas usually differ in respect of resource capacity and needs. For instance, the revenue base per capita often differs substantially between highly urbanised geographical areas and rural areas. In addition, the needs for public services amongst different areas may also differ, as some areas may have a higher percentage of school children or a higher disease rate than others. Economies of scale would also make it more economical to render services in areas with high population density than in other areas. It is therefore often difficult to design fiscal systems that can cope with this complex reality.

Rao (2007:320) argues that the differences between the capacities of sub-national governments to raise revenues could violate horizontal equity among individuals residing in different jurisdictions. To this extent, intergovernmental transfers promote horizontal equity by providing sub-national governments of varying fiscal capacities with the ability to provide comparable levels of public services at comparable levels of taxation (Choudhry and Perrin 2007:261).

VERTICAL FISCAL IMBALANCE AND FISCAL STRESS

According to Shah (2007:17), a vertical fiscal imbalance can be defined as the revenue deficiency arising from a mismatch between revenue means and expenditure needs, typically of lower orders of government. This occurs when a national government has more revenue than it needs to fulfil its spending responsibilities, and sub-national governments have

Table 1: Fiscal stress induced by vertical fiscal imbalance

Column 1: Province	Column 2: Per capita spending	Column 3: Per capita spending variance (mean)	Column 4: Per capita spending variance (top 3 average)	Column 5: Fiscal stress (scenario 1)	Column 6: Fiscal stress (scenario 2)
Eastern Cape	10 064	-258	1 031	-1 751 020 200	6 997 293 900
Free State	10 697	-891	398	-2 483 038 800	1 109 146 400
Gauteng	7 622	2 184	3 473	28 205 923 200	44 853 100 400
KwaZulu-Natal	9 854	-48	1 241	-513 331 200	13 271 750 400
Limpopo	9 915	-109	1 180	-613 724 500	6 643 990 000
Mpumalanga	9 561	245	1 534	1 036 178 500	6 487 746 200
Northern Cape	12 525	-2 719	-1 430	-3 172 257 300	-1 668 381 000
North West	9 548	258	1 547	948 485 400	5 687 236 100
Western Cape	8 470	1 336	2 625	8 171 376 800	16 055 287 500
Hypothetical cost of providing a service: R11 095 Mean per capita spending: R9 806					

Source: Adapted from Rakabe (2013:157)



fewer revenue sources than they need to fulfil their expenditure responsibilities. Provincial governments in South Africa experience enormous fiscal imbalances, as they raise only approximately 3.5% of their own revenues, making the 96.5% ratio of fiscal transfers from the national government to provinces unprecedentedly high (Manuel 2007:4).

An important consequence of vertical fiscal imbalance is the fiscal stress it places on sub-national governments. Arnett (2011:50) defines fiscal stress as a government's inability to meet its financial obligations as they arise, which may be accompanied by an inability to raise revenues or to provide goods and services. When there is an imbalance between the revenue assigned to a sub-national government and its expenditure responsibilities, a sub-national government may find it difficult to meet the minimum service requirements or expenditure commitments imposed by the national government or statutes (Rakabe 2013:148). National government controls tax and debt limits, determines public wages, sets delivery norms and standards, determines legislations, and mandates sub-national governments to provide certain services. Without sufficient revenue, sub-national governments will find it difficult to provide services at a prescribed standard.

Table 1 provides an indication of the fiscal stress induced by the existence of a vertical fiscal imbalance amongst the different provinces in South Africa.

The following can be established from the table:

- The per capita spending per province is indicated in the second column, with the Northern Cape spending the highest, and Gauteng the lowest, per capita.
- The average of the three provinces with the highest per capita spending (Northern Cape, Free State and Eastern Cape) is used as the hypothetical cost of providing standard level services. The hypothetical cost is R11 095.
- The mean per capita spending is R9 806 and is calculated as an average of the per capita spending of the nine provinces.
- The mean per capita spending variance (the difference between the per capita spending and mean per capita spending) is indicated in the third column.
- The per capita spending variance in the fourth column refers to the difference between the hypothetical cost of R11 095 and actual per capita spending.
- The two scenarios demonstrate the difference between actual and mean per capita spending in terms of the extent to which provincial budgets need to be adjusted upwards or downwards, if actual per capita spending is normalised across all provinces to a mean average. In the first scenario, where actual per capita expenditure is compared to mean per capita spending, the fiscal stress is only concentrated in four provinces (indicated in italics) because of lower actual per capita spending. In the second scenario, where actual per capita expenditure is compared to an average of the three highest per capita expenditures, a significant element of stress is implied.

From the table, it is clear that Gauteng, the Western Cape, North West and Mpumalanga experience the highest fiscal stress, whilst the Northern Cape and the Free State experience the least amount of fiscal stress. However, the provinces have different demographic and economic profiles, noticeably different levels of economic development and significant variations in socio-economic circumstances (National Treasury 2001:77). The levels of wealth or income within a province are further important determinants of the demand

for social services, particularly primary health care, education and income support (Yemek 2005:2). One of the critical challenges that the national government faces is, therefore, how best to redistribute national revenues with a view to ensure equity and alleviate poverty.

INTERGOVERNMENTAL TRANSFERS TO PROVINCES

According to Islam (2007:XV11), intergovernmental fiscal transfers are dominant features of the finances of sub-national governments in most countries. Furthermore, a key feature of South Africa’s intergovernmental fiscal relations system is that revenue powers are less decentralised than expenditure responsibilities. Therefore, notwithstanding South Africa’s relatively decentralised government structure, an important gap exists between the expenditure responsibilities of provincial governments and their revenues (Amusa and Mathane 2007:281).

The wide variations in resource endowments and per capita income levels of provincial governments in South Africa mean that they lack the adequate fiscal capacity to meet their constitutional mandates (Amusa and Mathane 2007:281). This imbalance makes transfers by national government to provincial governments inevitable (Durham and Verwey 2012:17). For this reason, intergovernmental fiscal transfers are a cornerstone of South Africa’s intergovernmental fiscal relations system.

The following table provides an indication of the division of the available revenue raised nationally between the three spheres of government.

Table 2: Division of nationally raised revenue, 2012/13–2018/19

Outcome	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
	Percentage shares			Revised estimate	Medium-term estimates		
National departments	47.9%	47.9%	48.2%	48.9%	48.1%	47.5%	47.4%
Provinces	43.4%	43.4%	43.2%	42.2%	42.9%	43.4%	43.3%
Local governments	8.7%	8.7%	8.6%	8.9%	9.0%	9.1%	9.3%

Source: Adapted from National Treasury Budget Review (2016:iv)

From table 2, it is evident that national and provincial governments receive the largest portions of more than 40% respectively, while local governments receive the smallest share of less than 10%. The reason for this is that local governments fund the majority of their spending through charges and taxes they collect themselves (National Treasury 2016:76).

According to Shah (2016:55) as well as Amusa and Mathane (2007:281), intergovernmental transfers derived mainly from nationally-raised revenues can be broadly classified into two categories, namely general-purpose (unconditional) and specific-purpose (conditional or earmarked) transfers. In South Africa, general purpose transfers are known as equitable share transfers (RSA 1996:120). For the purpose of this article, the focus will be on these general-purpose (equitable share) transfers.



GENERAL-PURPOSE (UNCONDITIONAL) TRANSFERS

General-purpose transfers (unconditional grants) are provided as general budget support with no strings attached, and they are normally mandated by law, but may occasionally be of an *ad hoc* or discretionary nature (Shah 2016:55). Gildenhuis (2008:198) supports this notion by stating that unconditional grants are grants made without any conditions being imposed by the donor government on how they should be spent.

By allowing sub-national governments to select the services on which grant revenue will be spent, unconditional grants impinge less on the autonomy of sub-national governments than do conditional grants, and have virtually no distortive effects (Kitchen 2007:496). Normally, the purpose of unconditional grants is to create horizontal equality between governments at the same level so that governments with extensive financial needs and relatively small financial capacity can benefit from those grants (Gildenhuis 2008:198). Unconditional grants should provide equity, efficiency, predictability, flexibility, and accountability (Kitchen 2007:498).

Equity: Allocated funds should vary directly with fiscal need factors, for example, education services (population of school age 6–18) and transport services (total length of roads in the province), and inversely with the tax capacity of each authority (Shah 2007:15). Vertical equity is achieved when a provincial government's revenue-raising capabilities are consistent with its expenditure responsibilities and needs (Kitchen 2007:498). A provincial government whose revenue base is not large enough to meet its expenditure needs will require a grant to meet those needs. Horizontal equity exists when two provincial governments with the same expenditure needs, but different tax bases, are able to provide a comparable level of service at comparable tax rates (Kitchen 2007:498). The provincial government with the smaller tax base and/or the greater need will require a grant if it is to provide services comparable to those in other provincial governments.

Economic efficiency: The design of the unconditional grant should be neutral with respect to provincial governments' choices of resource allocation to different sectors or types of activity (Shah 2007:15). The fiscal transfer from national government should not intervene in the decision-making processes of provincial governments, and provincial governments should be autonomous in introducing their own taxes and levies, irrespective of what they receive in the form of transfers. Economic efficiency is achieved if a grant does not affect the expenditure patterns of a recipient government, or if it affects spending in a way that corrects existing distortions in expenditure practices (Kitchen 2007:498). Economic efficiency, therefore, suggests that the grant from national government should not distort the choices or the types of activity of provincial governments. A grant is not efficient if a provincial government can affect the size of the grant it receives by manipulating its expenditures.

Predictability and flexibility: Predictability is important because provincial governments need to be able to budget and plan for the future. At the same time, grants should be flexible enough to allow provincial governments to respond to changing economic circumstances. The grant mechanism should ensure the predictability of provincial governments' shares by publishing five-year projections of funding availability (Shah 2007:15).

Accountability: Accountability implies that citizens should be able to hold sub-national governments responsible for the way in which grant funds are spent (Kitchen 2007:498). The grantor must be accountable for the design and operation of the programme, whilst the

recipient must be accountable to the grantor and its own citizens for financial integrity and results, that is, improvements in service delivery performance (Shah 2007:15). If unconditional grants enhance accountability at the sub-national government level, they may diminish it at the level of the donor government, since in passing on funds without conditions, the donor government also passes on much of the responsibility for using funds equitably and efficiently.

Ease of administration: A grant should be easy and inexpensive to administer (Kitchen 2007:498).

In order to meet the abovementioned criteria, a formula-based grant, such as the equitable share grant, is preferred over ad hoc and discretionary grants, as it increases the likelihood of meeting these criteria. Equitable share allocations are general-purpose (or unconditional) grants that are intended to do the following (Amusa and Mathane 2007:281):

- reduce fiscal imbalances stemming from the asymmetric matching of revenue and expenditure functions;
- enable sub-national governments to provide basic services and perform any functions assigned to them.

In South Africa, this equitable share involves the following three main components (Financial and Fiscal Commission 1996:3, cited in Dollery 1998):

- percentages of nationally collected individual income tax, value added tax or other sales tax and the fuel levy;
- transfer duties on property situated within a province;
- other conditional or unconditional allocations out of the national revenue.

The legislation giving effect to the constitutional provisions for the equitable share is the *Intergovernmental Fiscal Relations Act, 97 of 1997* of which Section 10 states that a Division

Table 3: Distributing the equitable shares by province, 2016 medium term expenditure framework

	Education 48%	Health 27%	Basic share 16%	Poverty 3%	Economic activity 1%	Institutional 5%	Weighted average 100%
Eastern Cape	15.1%	13.5%	12.6%	16.2%	7.7%	11.1%	14.0%
Free State	5.3%	5.3%	5.1%	5.3%	5.1%	11.1%	5.6%
Gauteng	17.8%	21.7%	24.0%	17.2%	33.8%	11.1%	19.7%
KwaZulu-Natal	22.4%	21.8%	19.9%	22.3%	16.0%	11.1%	21.2%
Limpopo	13.1%	10.3%	10.4%	13.6%	7.3%	11.1%	11.8%
Mpumalanga	8.5%	7.4%	7.8%	9.1%	7.6%	11.1%	8.2%
Northern Cape	2.3%	2.1%	2.2%	2.2%	2.0%	11.1%	2.6%
North West	6.5%	6.7%	6.7%	8.0%	6.8%	11.1%	6.9%
Western Cape	9.0%	11.1%	11.3%	6.1%	13.7%	11.1%	10.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Adapted from the Division of Revenue Act, 2016 (RSA 2016:78)



of Revenue Act must be adopted annually to specify the equitable share transfer to be made. The Financial and Fiscal Commission makes recommendations to Parliament on each such bill (Choudhry and Perrin 2007:173).

According to Amusa, Mabunda and Mabugu (2008:455), equitable share transfers give sub-national governments some relative autonomy and flexibility in designing grant expenditure frameworks and in altering spending to suit provincial and local priorities. This form of transfer is criticised by Rao and Khumalo (2003:3), who are of the opinion that unconditional transfers to sub-national governments, without significant tax powers, may essentially be made to employ the sub-national governments as spending agencies.

The following table provides an indication of the distribution of the equitable share amongst the different provinces (RSA 2016:78).

The formula used to calculate the equitable share, as shown above, represents the six components that make up the relative demand for services among provinces, and takes into account specific provincial circumstances.

For the 2016 Budget, the formula components are set out as follows (RSA 2016:77):

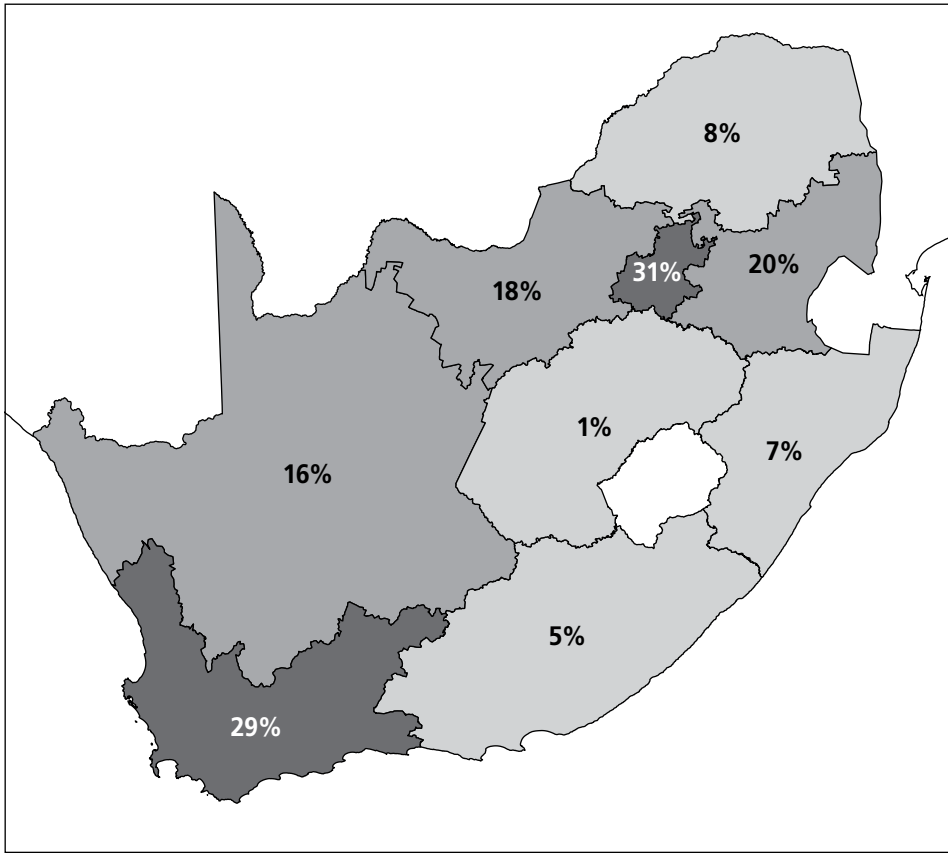
- **an education component** (48%) based on the size of the school-age population (ages 5 to 17) and the number of learners (grades R to 12) enrolled in public ordinary schools;
- **a health component** (27%) based on each province's risk profile and health system case load;
- **a basic component** (16%) derived from each province's share of the national population;
- **an institutional component** (5%) divided equally among the provinces;
- **a poverty component** (3%) based on income data (this component reinforces the redistributive bias of the formula);
- **an economic output component** (1%) based on regional gross domestic product (GDP-R), measured by Statistics South Africa.

The formula's components are neither indicative budgets nor guidelines as to how much should be spent on functions in each province or by provinces collectively. Rather, the education and health components are weighted broadly in line with historical expenditure patterns to indicate the relative need. Provincial executive councils have discretion regarding the determination of departmental allocations for each function, taking into account the priorities that underpin the division of revenue (RSA 2016:77).

The formula for calculating the equitable share transfers to provinces has been updated to reflect population changes observed in the 2011 Census. Figure 1 shows how population growth varies significantly across the country, with more urbanised provinces growing faster than others (National Treasury 2013:111).

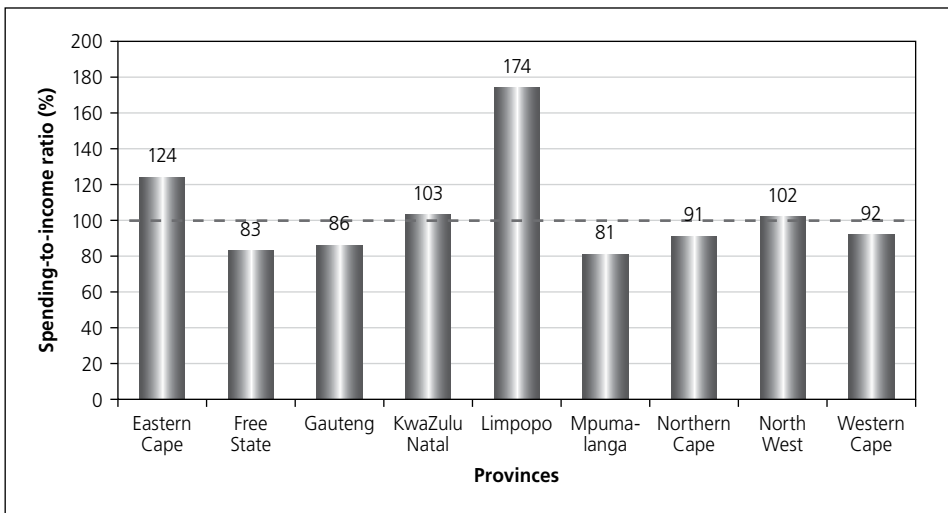
A study conducted by Chitiga, Fofana and Mabugu (2011:1–20) demonstrates that the current intergovernmental fiscal transfer system has significant inter- and intraregional equity effects on provinces (the formula used for the 2016/17 allocations is still the same). To comprehend the impact of the equitable share allocations to provinces, Figure 2 presents the disparities in revenues collected in each province against national government allocations to the different provinces. The amounts indicated for each province in the table is for every R100 collected in that province.

Figure 1: Population growth by province



Source: National Treasury (2013:19)

Figure 2: National government spending-to-income ratio by province



Source: Adapted from Chitiga et al. (2011:11)

In the scenario where the equitable share transfer from national government is more than the revenue collected in a province, such a province is regarded as having received a net gain transfer. However, if the equitable share transfer is less than the revenue collected, the province is regarded as having received a net loss transfer.

According to Chitiga *et al.* (2011:11), Limpopo and the Eastern Cape are by far the provinces that receive the greatest net transfers from the national government. For every R100 collected in these regions, the national government spends R174 and R124, respectively. KwaZulu-Natal and the North West Province are the two other regions that receive net transfers from the national government, but to a lesser extent, with R103 and R102 for every R100 collected, respectively (Chitiga *et al.* 2011:11).

In contrast, national government spending is less than the collected revenues in Mpumalanga, the Free State and Gauteng, with R81, R83, and R86 spent respectively for every R100 collected, whilst the Northern Cape and Western Cape receive R91 and R92 respectively for every R100 collected in these regions (Chitiga *et al.* 2011:11).

From the aforementioned summary it can be concluded that there is a greater need for horizontal equality in Limpopo and the Eastern Cape than in Mpumalanga and the Free State. It can further be concluded that Limpopo and the Eastern Cape are provinces with extensive financial needs and relatively small financial capacities, and therefore benefit most from the equitable share.

CONDITIONAL GRANTS

The second mechanism for transfers to provinces is conditional grants, which are intended to fund specific-purpose programmes. By nature, conditional grants are designed to provide incentives for sub-national governments to spend funds in specific ways or on specific projects (Kitchen 2007:498). Conditional grants can be used to address inter-jurisdictional spill-overs, to meet national redistribution objectives and to aid the implementation of specific national priorities and policies related to socio-economic services provided by sub-national governments (Amusa & Mathane 2007:281). According to Amusa *et al.* (2008:455), conditional grants emphasise spending on national priority programmes, and they often have stringent accounting and planning conditions attached to their use. Kitchen (2007:498) also refers to the fact that conditional grants must be spent on specific services or facilities and are appropriate for funding services that generate externalities.

According to Shah (2016:56), conditional grants normally specify the type of expenditures that can be financed (input-based conditionality) such as capital expenditures, operating expenditures, or both, and may also require the attainment of certain results in service delivery (output-based conditionality).

The framework for the various conditional grants is set out in the annual *Division of Revenue Act*, 2016, which lists the following key areas that should be considered for each grant (RSA 2016:113):

- strategic goal and purpose of the grant;
- outcome statements and outputs of the grant;
- priority outcome(s) of government to which the grant primarily contributes;
- conditions of the grant (in addition to what is required in the Bill);

- criteria for allocation between provinces;
- rationale for funding through a conditional grant;
- past performance;
- the projected life of the grant;
- the 2016 medium term expenditure framework allocations;
- the payment schedule;
- responsibilities of the transferring national department and receiving provincial departments; and
- process for approval of business plans for 2017/18.

Slack (2007:466) states that conditional grants are fungible in the sense that even though there are certain conditions to be met, there is no guarantee that the recipient will spend the funds on what the donor government intended. Shah (2007:7) argues that the fungibility of conditional grants depends both on the level of spending on the assisted public service and on the relative priority of such spending. If a sub-national government's own-financed expenditure on the assisted category exceeds the amount of the conditional grant, the conditionality of the grant may or may not have any impact on the recipient's spending behaviour. In such a scenario, all, some or none of the grant funds could be allocated to the assisted function. Practical experience has also indicated that it is difficult to enforce the conditions, as there may be significant opportunities for fungibility of funds. Experience has further shown that there is no one-to-one correlation between increases in public spending and improvements in service delivery performance (Shah 2007:13). Sub-national governments can also reallocate their own-source revenues to undo the effects of conditionality.

Whatever the theoretical merits of conditional grants, practical difficulties have led to an array of conditional transfers that are so detailed, complex and unrelated to the purpose for which they are intended that in many countries, their use has led to ineffective sub-national governments as well as a resistance towards the grants (Bird and Smart 2002:899–912). According to Amusa and Mathane (2007:281), resistance to conditional grants is due to the following two major factors:

- the perceived burden associated with the administration and implementation of these grants;
- the lack of significant provincial autonomy and flexibility in designing grant frameworks and altering spending to suit local priorities.

The consequences of these divergent positions regarding the use of conditional grants have often been delays in the transfer of funds by national government (Amusa and Mathane 2007:281). Another major disadvantage of conditional grants is that they can also undermine the ability of sub-national governments to respond to provincial and local priorities (Kitchen 2007:496).

INTERGOVERNMENTAL TRANSFERS IN SOUTH AFRICA MEASURED AGAINST OBJECTIVE DETERMINANTS.

Due to the unique differences among provinces in South Africa and the complexity of service delivery, it is necessary to measure the intergovernmental fiscal transfers against



objective determinants such as the Human Development Index, the Gini coefficient and the Human Poverty Index. It is also worthwhile to compare the population size and land area per province.

POPULATION SIZE AND LAND AREA BY PROVINCE

According to Statistics South Africa (2014:3), the population of South Africa has increased to an incredible 54 million. Gauteng is the largest province by population size with 12.9 million people, followed by KwaZulu-Natal at 10.6 million.

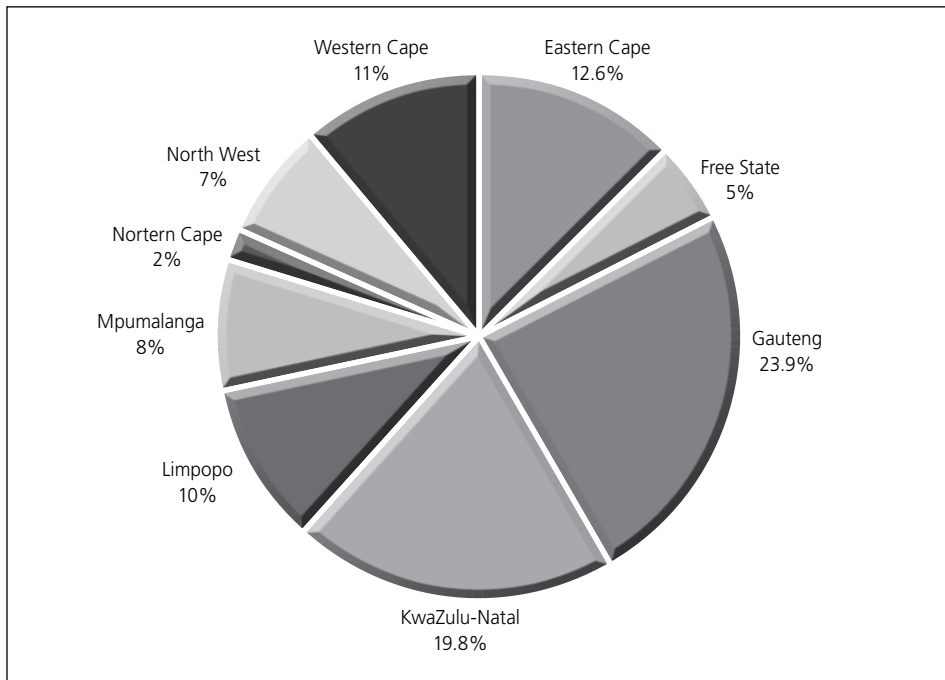
POPULATION SIZE PER PROVINCE

Figure 3 provides a breakdown of the population size per province.

The population growth in Gauteng can be attributed to labour migration, as people tend to leave their provinces of usual residence in search of work in the more industrialised provinces such as Gauteng and the Western Cape (Statistics South Africa 2012:2). The least populated province is the Northern Cape with 1.1 million people, followed by the Free State at 2.7 million.

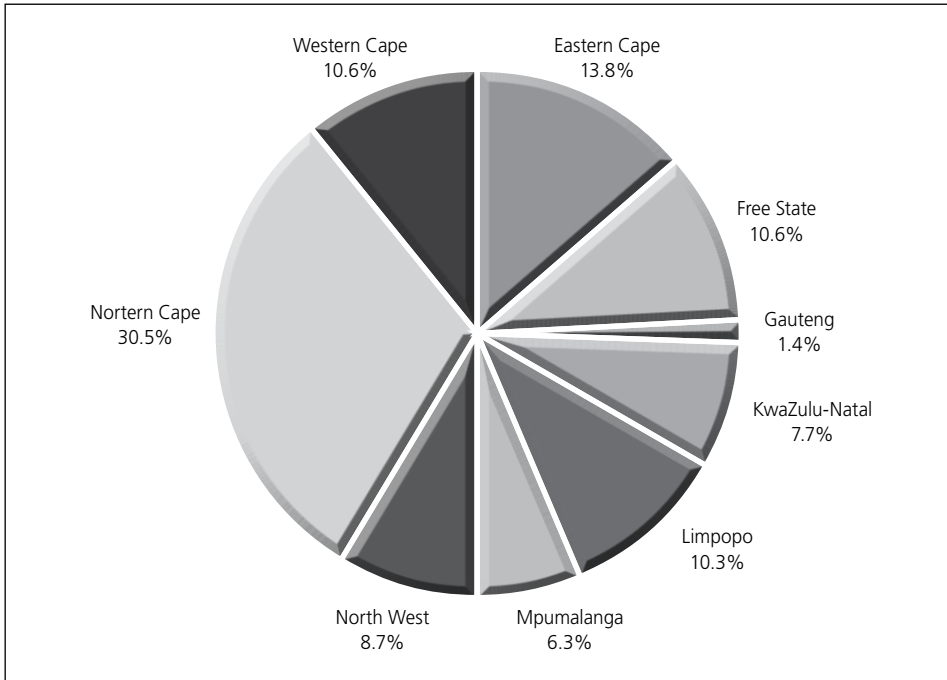
What is significant from the statistics about population size and the land area by province is that Gauteng has the largest population, even though it is the smallest in square kilometres, whilst the Northern Cape has the smallest population, although it is the largest in square kilometres.

Figure: 3 Population size per province



Source: Adapted from Statistics South Africa (2012:12)

Figure 4: Land area by province



Source: Adapted from Statistics South Africa (2012:12)

LAND AREA BY PROVINCE

Figure 4 provides a breakdown of the land area by province.

When compared to a province like Gauteng, the Northern Cape has several unique features that pose specific challenges for the delivery of services. It has the smallest population of the nine provinces (1.1 million or 2% of the total population) but has the largest geographic area (372 889 square kilometres or 30.5% of the country's surface area) (Statistics South Africa 2012:9–18). At 30.5% of the land area, it is more than 21 times bigger than Gauteng. The capital, Kimberley, has a population of approximately 300 000, with the remaining population scattered in small towns and settlements across a vast geographical area (Northern Cape Department of Health 2009:9; Gelb 2004:9). The size of the province and low population density make the task of ensuring equitable access to services complex and costly, and services may seem less efficient than in other provinces, where economies of scale are more possible (Northern Cape Department of Health 2009:9). The distance between one primary health care facility and the next level of care can be up to 200 km, for instance (Northern Cape Department of Health 2009:9).

HUMAN DEVELOPMENT INDEX

According to the United Nations Development Programme (2015:2), the Human Development Index (HDI) is a composite index focusing on three basic dimensions of human



development: to lead a long and healthy life (longevity), measured by life expectancy at birth; the ability to acquire knowledge, measured by mean years of schooling and expected years of schooling; and the ability to achieve a decent standard of living, measured by gross national income per capita.

The HDI serves as an indication of where a country or province is in terms of development. The index contains values between 0 and 1. Countries with a value over 0.8 on the index are part of the High Human Development group. Countries between 0.5 and 0.8 are part of the Medium Human Development group, while those below 0.5 are part of the Low Human Development group (Economic Glossary 2013:1).

The following table provides the HDI of the different provinces in South Africa.

Table 4: Human Development Index per province

Province	HDI
Eastern Cape	0.51
Free State	0.55
Gauteng	0.66
KwaZulu-Natal	0.53
Limpopo	0.48
Mpumalanga	0.52
Northern Cape	0.57
North West	0.52
Western Cape	0.69
South Africa	0.57

Source: Adapted from Eastern Cape Socio Economic Consultative Council (2012:1).

From the table, it is evident that none of the provinces are in the High Human Development group. In fact, all the provinces, with the exception of Limpopo, are in the Medium Human Development group. Limpopo, with an HDI of 0.48, is in the Low Human Development group. Although the rest of the provinces are in the Medium Human Development group, the majority is in the lower band of that group. Only the Western Cape, with 0.69, and Gauteng, with 0.66, are in the middle band of the Medium Human Development group.

POVERTY INDICATORS

One of the objectives of government is to eliminate poverty (RSA 2016:109). It is therefore necessary for provincial governments to implement programmes and projects in line with this objective. The following table provides an indication of the poverty indicators per province.

Table 5: Poverty indicators per province

Province	Food poverty line (R305)			Lower-bound poverty line (R416)			Upper-bound poverty line (R577)		
	P0	P1	P2	P0	P1	P2	P0	P1	P2
Limpopo	48.5	16.6	7.8	62.1	26.9	14.4	74.3	38.8	23.6
Eastern Cape	35.7	11.8	5.3	51.0	20.4	10.4	66.1	31.1	18.0
Mpumalanga	32.1	10.9	5.1	47.6	18.7	9.7	62.5	29.1	16.7
KwaZulu-Natal	33.0	10.7	4.8	46.1	18.5	9.5	60.2	28.2	16.3
Northern Cape	26.0	7.9	3.3	42.6	14.8	7.1	58.2	24.9	13.4
Free State	24.6	7.1	2.9	42.0	14.1	6.5	57.8	24.3	12.8
North West	26.3	8.8	4.1	42.0	15.6	7.9	56.9	25.1	14.0
Western Cape	9.0	2.2	1.0	17.8	5.5	2.4	30.6	10.8	5.2
Gauteng	10.1	2.6	1.0	18.1	5.7	2.5	29.0	10.7	5.3
RSA	26.3	8.5	3.8	38.9	15.0	7.5	52.3	23.6	13.3

Source: Adapted from Statistics South Africa (2012:11)

Table 5 presents the three poverty indicators (poverty headcount, poverty gap and severity of poverty) by province. The poverty headcount (P0) refers to the proportion of the population living below a poverty line, while the poverty gap (P1) refers to the mean distance of the poor from the poverty line. The severity of poverty (P2) is an indicator that takes account of extreme poverty by giving greater weight to those further from the poverty line.

According to the Local Conditions Survey 2008/2009, using the food poverty line, Limpopo was the poorest province (48.5%) in South Africa, followed by the Eastern Cape (35.7%) and KwaZulu-Natal (33.0%). The Western Cape and Gauteng had the lowest poverty headcounts, with 9.0% and 10.1% respectively, compared to other provinces (Statistics South Africa 2012:11). Poverty headcounts by province based on the upper-bound poverty line shows a slightly different pattern from that of the food poverty line.

While Limpopo remained the poorest province for both poverty lines, KwaZulu-Natal and Mpumalanga have switched places. KwaZulu-Natal was the third poorest province using the food poverty line, and the fourth poorest province using the upper-bound poverty line. The same pattern is observed with the Western Cape and Gauteng. Using the food poverty line, the Western Cape was the richest province and Gauteng the second richest, and *vice versa* for the upper-bound poverty line. This means that there are more people with low expenditure in KwaZulu-Natal than in Mpumalanga, and so dropping the poverty line increases the relative share of poverty in KwaZulu-Natal, which is below the line. This also applies to the Western Cape and Gauteng, as there are more people at the low end of the distribution. This is further illustrated in the poverty gap estimates.

Table 4 further indicates that the higher the poverty headcount of a province, the higher the poverty gap and the severity of poverty estimates tend to be. This shows that in provinces where there are high levels of poverty, the poor are usually far below the poverty line compared to provinces with low levels of poverty (Statistics South Africa 2012:11).

GINI COEFFICIENT

According to Bellù and Liberati (2006:6), the National Institute of Statistics and Economic Studies of France (2013:1) and the World Bank (2013:1), the Gini coefficient (or index) is a composite indicator of inequalities in wages, income and standard of living. The Gini coefficient varies between 0 and 1. It would be equal to 0 in situations of perfect equality, where all wages, income and standards of living were equal. Conversely, it would be equal to 1 in the most unequal situation possible. The higher the Gini index, the greater the inequality between income or standards of living.

Table 6 provides an indication of the Gini coefficient per province in South Africa.

Table 6: Gini coefficient per province

Province	Gini coefficient
Limpopo	0.59
Eastern Cape	0.60
Mpumalanga	0.61
KwaZulu-Natal	0.59
Northern Cape	0.61
Free State	0.59
North West	0.60
Western Cape	0.61
Gauteng	0.60
RSA	0.64

Source: Adapted from Statistics South Africa (2012:13)

According to Table 6, the provincial Gini coefficient appears to be rather similar across all the provinces, ranging from 0.59 to 0.61. Thus, all provinces are burdened with highly unequal societies. Additionally, levels of inequality of the individual provinces are lower than when inequality is measured across all provinces, where the Gini coefficient for the country is 0.64 (Statistics South Africa 2012:13). Donnelly (2013:3) argues in this regard that if the effect of government policies such as social grants and free basic services are not included, the Gini coefficient would be higher at a level of 0.73.

An analysis of the Gini coefficient of the provinces indicates that, although the levels of inequality between the provinces are very close (between 0.59 and 0.61), the Northern Cape, the Western Cape and Mpumalanga have the highest levels of inequality, whilst Limpopo, KwaZulu-Natal and the Free State are the most equal. South Africa's Gini coefficient was also much higher than countries such as Egypt (30.8), India (33.4), Indonesia (34), Russia (40.1), Paraguay (52.4) and Brazil (54.7) (Donnelly 2013:3).

EVALUATION OF TRANSFERS TO PROVINCES

In total, national government will transfer R499 844 billion to provincial governments in the 2016/17 financial year. The following table provides a breakdown of the total transfers to the different provinces.

Table 7: Breakdown of total transfers to provinces 2016/17

Province	Equitable share (R billion)	Conditional grants (R billion)	Total transfers (R billion)
Eastern Cape	58 060	10 243	68 304
Free State	22 995	6 816	29 811
Gauteng	79 600	18 839	98 439
KwaZulu-Natal	87 898	17 489	105 387
Limpopo	48 709	7 120	55 829
Mpumalanga	33 450	6 987	40 437
Northern Cape	10 863	3 751	14 614
North West	28 062	7 041	35 103
Western Cape	41 062	10 749	51 811
Unallocated		112 112	112 112
Total	410 699	89 146	499 844

Source: RSA (2016:73)

An analysis of the total transfers to provinces against specific objective determinants indicates that there is a strong correlation between the size of the transfer and the population size of a province. The following figure illustrates the correlation between population size and the transfer amount.

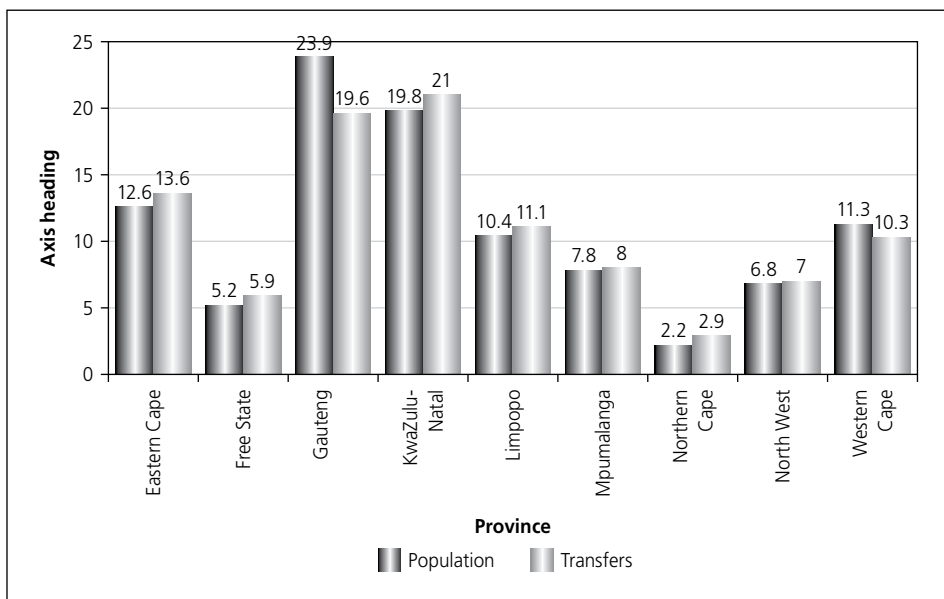
The 2.9% share of the budget for the Northern Cape, with a population size of 2.2%, and the 21% share for KwaZulu-Natal, with a population of 19.8%, are evidence of this correlation.

However, further analysis indicates that KwaZulu-Natal receives the largest portion (21%) of the budget, although its population size is the second highest at 19.8%. Gauteng, with 23.9%, has the highest population size but receives a smaller percentage transfer (19.6%) than KwaZulu-Natal. This is in line with the HDI as well as the poverty indicators that rate KwaZulu-Natal as poorer as and less developed than Gauteng.

Two provinces that compare fairly well with each other are Limpopo and the Western Cape, with population sizes of 10.4% and 11.3% respectively. The land area of the Western Cape is 10.6%, and that of Limpopo 10.3%. However, the percentage transfer to Limpopo was 11.1% and that of the Western Cape only 10.3%. This represents a difference of R4.018 billion. The difference in the total amount transferred can be justified against the HDI, which lists Limpopo as the province with the lowest value on the index, and the Western Cape



Figure 5: Population size and transfer amount



as the province with the highest. According to the poverty indicators, Limpopo is also the poorest province, while the Western Cape has one of the lowest poverty headcounts.

The 2.9% share of the budget compared to 2.2% of the population for the Northern Cape can be justified by taking into account the vastness of the province and the lack of economies of scale in providing services.

CONCLUSION

Intergovernmental fiscal transfers are an integral part of the intergovernmental fiscal relations system of any country. National government makes use of transfers to sub-national governments to enable them to deliver their mandated services. These transfers are normally in the form of conditional and unconditional grants. Without sufficient transfers, sub-national governments will not be able to deliver such services, as they have limited revenue-raising capacities.

This article has determined that transfers to provinces in South Africa are mainly population driven and have a strong resemblance to the population size of a province. However, a further analysis has indicated that transfers are in line with the HDI and poverty indicators. The Gini coefficient, ranging from 0.59 to 0.61, is so similar across all provinces that it is not possible to measure the difference in transfers against this coefficient.

BIBLIOGRAPHY

Amusa, H., Mabunda, R. and Mabugu, R. 2008. Fiscal illusion at the local sphere: An empirical test of the flypaper effect using South African municipal data. *South African Journal of Economics*, 76(3):443–465.

- Amusa, H. and Mathane, P. 2007. South Africa's intergovernmental fiscal relations: An evolving system. *South African Journal of Economics*, 75(2):265–292.
- Arnett, S. 2011. Fiscal stress in the U.S. states: An analysis of measures and responses. <https://smartech.gatech.edu/handle/1853/42860>. (Accessed 10 June 2016).
- Bellù, L.G. and Liberati, P. 2006. Inequality analysis: The Gini index. http://www.fao.org/docs/up/easypol/329/gini_index_040en.pdf. (Accessed 13 June 2016).
- Bird, R.M. and Smart, M. 2002. Intergovernmental fiscal transfers: International lessons for developing countries. In Boadway, R. and Shah, A. (eds.), *Public sector governance and accountability series: Intergovernmental fiscal transfers; Principles and practice*. Washington: The World Bank, 483–509.
- Chitiga, M., Fofana, I. and Mabugu, R. 2011. A multiregion general equilibrium analysis of fiscal consolidation in South Africa. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.226.9419&rep=rep1&type=pdf>. (Accessed 28 June 2016).
- Choudhry, S. and Perrin, B. 2007. The legal architecture of intergovernmental transfers: A comparative examination. In Boadway, R. and Shah, A. (eds.), *Public sector governance and accountability series: Intergovernmental fiscal transfers; Principles and practice*. Washington: The World Bank, 259–292.
- Dollery, B. 1998. An initial evaluation of revenue-sharing arrangements in the new South African fiscal federalism. *Publius: The Journal of Federalism*, 28(2):129–153.
- Donnelly, L. 2013. Welfare could be Gini in the bottle: Inequality barometer is far lower than officially calculated if grants are taken into account. *Mail & Guardian*, 10 May 2013. <http://mg.co.za/article/2013-05-10-00-welfare-could-be-gini-in-the-bottle>. (Accessed 8 November 2013).
- Durham, S. and Verwey, L. 2012. *South African budget guide and dictionary*. Pretoria: Idasa.
- Eastern Cape Socio Economic Consultative Council. 2012. Development indicators. [www.ecsecc.org/files/library/.../Poverty social_statistics2012](http://www.ecsecc.org/files/library/.../Poverty_social_statistics2012). (Accessed 16 November 2013).
- Economic Glossary. 2013. Economic definition of human development index. <http://www.economicshelp.org/blog/glossary/human-development-index/>. (Accessed 3 July 2016).
- Gelb, S. 2004. Inequality in South Africa: Nature, causes and responses. http://www.tips.org.za/files/Gelb_Inequality_in_SouthAfrica.pdf. (Accessed 10 March 2016).
- Gildenhuys, J.S.H. 2008. *Public financial management*. 5th impression. Pretoria: Van Schaik Publishers.
- Hendriks, C.J. 2014. Intergovernmental fiscal relations: The paradox between the vertical fiscal imbalance and responsiveness and accountability in the Northern Cape Provincial Government. Unpublished PhD thesis. <http://scholar.ufs.ac.za:8080/xmlui/bitstream/> (Accessed 4 July 2016).
- Islam, R. 2007. *Preface*. In Boadway, R. and Shah, A. (eds.), *Public sector governance and accountability series: Intergovernmental fiscal transfers; Principles and practice*. Washington: The World Bank, xvii.
- Kitchen, H. 2007. Grants to small urban governments. In Boadway, R. and Shah, A. (eds.), *Public sector governance and accountability series: Intergovernmental fiscal transfers; Principles and practice*. Washington: The World Bank, 483–509.
- Manuel, T.A. 2007. Co-operative governance and intergovernmental fiscal relations. Address to the NCOP summit, Cape Town, 3 May 2007. http://www.treasury.gov.za/comm_media/speeches/2007/2007050301.pdf. (Accessed 7 January 2016).
- National Institute of Statistics and Economic Studies. 2013. Gini index. <http://www.insee.fr/en/methodes/default.asp?page=definitions/indice-gini.htm>. (Accessed 13 November 2013).
- National Treasury. 2001. Medium term budget policy statement. <http://www.treasury.gov.za/documents/mtbps/2001/6.pdf>. (Accessed 6 January 2016).
- National Treasury. 2013. Budget review 2013. <http://www.treasury.gov.za/documents/national%20budget/2013/> (Accessed 21 May 2016).

- National Treasury. 2016. Budget review 2016. <http://www.treasury.gov.za/documents/national%20budget/2016/review/default.aspx>. (Accessed 5 July 2016).
- Northern Cape Department of Health. 2009. Report of the integrated support team. <http://www.rhap.org.za/wp-content/uploads/2015/04/IST-report-Northern-Cape-DoH-FINAL.pdf>. (Accessed 16 February 2016).
- Rakabe, E. 2013. The state of fiscal stress in South Africa's provinces: Improving fiscal performance. www.essa2013.org.za/fullpaper/essa2013_2579.pdf. (Accessed 5 January 2016).
- Rao, M.G. and Khumalo, B. 2003. Sharing the cake: A review of provincial equitable share formula in South Africa. www.ffc.co.za/.../131-06-2-rao-g-khumalo-b-sharing-the-cake-32pp. (Accessed 25 May 2016).
- Rao, M.G. 2007. Resolving fiscal imbalances: Issues in tax sharing. In Boadway, R. and Shah, A. (eds.), *Public sector governance and accountability series: Intergovernmental fiscal transfers; Principles and practice*. Washington: The World Bank, 319–338.
- Republic of South Africa. 1996. *The Constitution of the Republic of South Africa*, 1996. Pretoria: Government Printer.
- Republic of South Africa. 1997. *Intergovernmental Fiscal Relations Act*, 97 of 1997. Pretoria: Government Printer.
- Republic of South Africa. 2016. *Division of Revenue Act*, 3 of 2016. Pretoria: Government Printer.
- Shah, A. 2007. A practitioner's guide to intergovernmental fiscal transfers. In Boadway, R. and Shah, A. (eds.), *Public sector governance and accountability series: Intergovernmental fiscal transfers; Principles and practice*. Washington: The World Bank, 1–51.
- Shah, A. 2016. Fiscal policies for coordinated urban-rural development and their relevance for China. *Public Finance and Management*, 16(1):51–74.
- Slack, E. 2007. Grants to large cities and metropolitan areas. In Boadway, R. and Shah, A. (eds.), *Public sector governance and accountability series: Intergovernmental fiscal transfers; Principles and practice*. The World Bank: Washington, 453–478.
- Statistics South Africa. 2012. Poverty profile of South Africa: Application of the poverty lines on the local conditions survey 2008/2009. <http://www.statssa.gov.za/publications/Report-03-10-03/Report-03-10-032009.pdf>. (Accessed 13 February 2016).
- Statistics South Africa. 2014. Mid-year population estimates 2014. <http://www.statssa.gov.za/publications/P0302/P03022014.pdf>. (Accessed 20 June 2016).
- The World Bank. 2013. Gini index. <http://data.worldbank.org/indicator/SI.POV.GINI>. (Accessed 4 April 2016).
- United Nations Development Programme. 2015. Human development report 2015. http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf. (Accessed 1 July 2016).
- Yemek, E. 2005. Understanding fiscal decentralisation in South Africa. <http://www.idasa.org.za>. (Accessed 15 June 2016).